Earth & Environmental Sciences Division

Our Mission

Earth and environmental science applied to complex problems of local, national, and global interest in:

Energy Security

Environment

National Security

EES Division Organizations

- EES Division Office (EES-DO)
- Hydrology, Geochemistry & Geology (EES-6)
- Geotechnical Engineering & Research (EES-7)
- Atmospheric & Climate Sciences (EES-8)
- Environmental Geology & Risk Analysis (EES-9)
- Environmental Dynamics & Spatial Analysis (EES-10)
- Geophysics (EES-11)
- Institute of Geophysics & Planetary Physics (IGPP)
- Los Alamos Seismic Research Center (LASRC)

EES Organization Contacts

Division Leader, Paul G. Weber

Deputy Division Leader, Kenneth G. Eggert

Groups, Center, and Institute Contacts:

EES-6	G. A. Valentine	EES-10	F. J. Barnes
EES-7	M. T. Peters	EES-11	M. C. Fehler
EES-8	H. P. Hanson	IGPP	G. H. Heiken
EES-9	F. V. Perry	LASRC	M. C. Fehler

Earth & Environmental Sciences

Science & Engineering Capabilities:

- Atmospheric, ocean, and climate science
- Computational analysis, modeling, and simulation
- Environmental science/risk assessment
- Geological engineering
- Geology, geochemistry, geomaterials
- Hydrology
- Geographic information sciences
- Land surface processes
- Seismology and wave phenomena

EES Facilities and Institute

- Geographic Information Systems Laboratory (GISLab)
- Geology & Geochemistry Research Laboratory (GGRL)
- Optically Stimulated Luminescence Facility (OSL)

EES Institute of Geophysics and Planetary Physics (IGPP)

- Astrophysics
- Space plasma physics
- Planetary interiors
- Planetary atmospheres
- Numerical methods for ocean modeling
- Lithospheric processes

EES Accomplishments

- National Security
  - Nonlinear slow dynamics effects (SD): the “memory” of disturbed strain as applied to materials for discerning damage in aging components
  - Ground-Based Nuclear Explosion Monitoring (NEM)
  - Find, characterize, and defeat hard and deeply buried targets
  - Repository Science: characterization of the proposed Yucca Mountain Site in Nevada
- Energy & Environment
  - Zero Emissions Coal & carbon management
  - Microdrilling & instrumentation technology: improved ability to collect and exploit subsurface information for energy resources
  - Atmospheric radiation measurement (ARM): improved climate modeling
- Basic & Applied Research
  - Climate change: geological evidence confirms role of climate in origin of hominids (*Nature*, July 2001)

EES Total Employee Profile

Technical Staff Members	145
Post-Doctoral Fellows	12
Technicians	30
Graduate Students	22
Office/General Support Staff	19
Support Staff Members	12
Undergraduate /High School Students	37
Contractors	23
Total	300

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